

• Department of Multimedia

1. Educational Goal

1) After accumulating the humanistic knowledge and virtue that can serve the nation and human societies on the basis of Christian faith, we aim to educate morally acting intellectuals who create healthy multimedia contents in this or related fields.

2) Educating professionals who respond to the changes of the diversified knowledge-based circumstance and a next-generation basic technology for Multimedia.

3) With technical skills and creativity and business ability and language skill of an international senses necessary in the era of rapidly changing global competition, we would aim to educate a professional acting intellectuals who have an idea of multitasking and are able to respond rationally and creatively.

4) We would aim to educate the reinforcement of the fundamental multimedia contents industry curriculum and on-site professional education of advanced specialization for upgrading the nation and a regional strategic industry.

2. Educational Objective

1) Comprehend the cultural phenomena involved with the overall multimedia and aim to cultivate competent intellectuals who have insightful perspectives and vision about new information on the basis of training.

2) To educate acting intellectuals for new technology who have a differentiated research skills, combining capacity promotion and creative ideas and digital engineering's technical solution to acquire a high knowledge or new technologies adaptable to a highly developed multimedia industry at technology society at the same time.

3) to aim at securing the research field of global level through innovative education which is of Systemizing, Thematization, Flexibility, and Globalization of Multimedia Study Field and fostering multiple intellectuals who have global mindsets, wide expertise on digital environments, technologies, and leadership.

4) By activating in the multimedia contents industry and setting up a cooperative system of fields of industry and academia and study, we would aim to foster an intellectuals who have professional industrial capacity competitive in the field of mutual multimedia contents.

• **List of Full-time Faculty**

Name	Position	Degree(University)	Field of Instruction	Area of Research
Seok soo, Kim	Prof.	Ph.D. (SungKyunKwan University)	Information Engineering	Multimedia Programming & Authoring
Jun Su, Kim	Associate Professor	M.FA (Hongik University)	Video Special Effect	Video Special Effect
Gil-Cheol, Park	Prof.	Ph.D. (SungKyunKwan University)	Information Engineering	Multi Media Communication
Byung joo, Park	Associate Professor	Ph.D. (University of Florida)	Wireless Communications & Networks	Mobile/Wireless Communications & Computer Networks
Yo Hwan, So	Prof.	M.S. (New York University College of Engineering)	science of communication	3D Animation / VFX
geum, yu	Assistant Professor	Ph.D. (Hanyang University)	Visual Multimedia Design	Motion Graphics
Dong Cheol, Lee	Assistant Professor	Ph.D. (Hanyang University)	Software Framework	Mobile Apps & Games
Sung Uk, Lee	Associate Professor	Ph.D. (University of Florida)	Information Security	Multimedia service security
Eun Seok, Lee	Prof.	M.FA (Sejong University)	Department of Design	CG Computer Graphic
E Jung, Choi	Prof.	Doctor in Political Science (Hankuk University of Foreign Studies)	Journalism and Broadcasting	Image Expression of Broadcasting
Ronnie D. Caytiles	Assistant Professor	Ph.D. (Hannam University)	multimedia	multimedia Game Design

• **Course Description**

MM601 Software Engineering Method Study 3credits

Covers an overview of various technologies of necessary software engineering and analysis, specification, design, implementation, testing, and maintenance. The software engineering methodology provides the introduction about the research.

MM602 Mobile System Study 3 credits

3G systems such as the currently used IMT-2000 has developed into 4G. The 4G systems provide a wider variety of high-speed multimedia services and those are currently the subject of only limited movement in the car, mail, robots, animals and all moving objects which are defined as ubiquitous service. In addition, through the provision of a more extended service area, various types of heterogeneous wireless and seamless global roaming between mobile networks has enabled increased reliability and integrated billing services. These mobile systems are evolving on the direction and overall approach to research on mobile systems.

MM603 Data Communication Seminar 3 credits

Data communication is handled by the machine to deal with the transfer of information which refers to data or data processing given the raw data to obtain the desired information from the computer where the handling of research on these data communications are learned through seminars.

MM604 Planning & Scenario 3 credits

For the detailed and comprehensive project for authoring multimedia content product, it will be equipped with project selection, configuration of the development team, and management skills. The classification of the title nature, writing planning, scenarios, storyboards and continuities trains the writing skills. Project planning, role allocation, scheduling, version management and documentation techniques trained the technical ability. The main contents of the courses which includes multimedia authoring, project planning, role allocation, scheduling, and version management techniques, and scenario / storyboard / storyboard creation exercises, multimedia authoring techniques documented in the course of project implementation, authoring tools and development objectives in accordance with the type of author tool selection and development of the title scenario.

MM605 Multimedia Design Special Lecture 3 credits

Multimedia design is a subject using computer, shape, space planning and expresses the general advertising, posters, illustrations, motion graphics, photo collages, the game screen, character design and other 2D graphics

Today's games and mobile forms of content are combined variously. They are applied to the multimedia design for overall learning.

MM606 Multimedia Authoring Seminar 3 credits

The ability to combine in a variety of media objects and stories or scenarios of the author and title yeonchulhae a technique common concepts, development tools, classification and data conversion, integration and synchronization of media data, the unit object in the collection and editing training through seminars and general

information about learning.

MM608 Multimedia Contents Authoring 3 credits

Multimedia content available on the multimedia refers to all services, comics, games, voice, sound, images, video and digital production, distribution and processing the various information or its contents to allow you to take advantage of it.

MM609 e-business Special Lecture 3 credits

Between the corporate and consumer e-commerce, unspecified information is through e-commerce between companies in the development of communication technology and enabled by the spread of Internet.

Internet E-commerce provides the students with network protocols, encryption programs, applications, real-time applications, e-currency, digital information, including information security consists of various technologies related to electronic commerce.

MM610 Multimedia Marketing Seminar 3 credits

In the past, companies were communicating to their customers in a one way. But now, through the development of a multimedia, interactive communication became possible. In this situation, through seminars, students will learn general information for internet based 1:1 marketing, or a new form of marketing.

MM611 Multimedia Communication Seminar 3 credits

When combined with communication, multimedia information has a higher value. It includes multimedia information on the overall understanding of the communications environment. Accordingly, learning and practice in the field of multimedia will be helpful. Multimedia content, will be studied rather than the traditional media(Broadcasting, Newspapers, etc.) through high-speed Information Communication systems which is required to deliver elsewhere in the theory, infrastructure, protocols(ATM, Gigabit Ethernet, etc.). And, the development of application systems(Video Conference, Video Telephone, VOD, Remote Education, etc.) will be studied through seminars.

MM612 Game Authoring Project 3 credits

Detailed and comprehensive production capabilities can be prepared for the game. And, a project to develop Internet computer games should be executed. In the main development practices, the development results is fully understood by examining theory. After that, a team of 2-3 people is on the game development projects. Through this understanding of game development and multimedia

production and integration of theory and experience for the order provide opportunities.

MM613 Multimedia Authoring & Implementation 3 credits

Scenarios designed to suit various media objects are directed(author or integration) to use an authoring tool. The ability to combine various media objects and story or scenario is a technique for directing the training. And implementation of these techniques are directly for the focused learning.

MM614 Media Research Methodology I 3 credits

This class will establish the theoretical and logical basis of a scientific research methodology for the media. Students will be equipped with independent research survey design, data collection and analysis, and the ability to accommodate all the courses.

MM615 Communication Theory 3 credits

Communication phenomenon and its various theories related to learning.

MM616 Study of Broadcasting & Video 3 credits

This class will study the broadcast and video from the perspective of communication.

MM617 Workshop of Computer Graphics Design 3 credits

Multimedia content is effective in expressing the understanding of the concept of graphic design.

And efficient method to study the subject as represented, is required for the expression of multimedia content production method of communication by way of representation.

Subjects include the main contents of the nature of graphic design, marketing, consumer behavior, psychology and human engineering research.

MM618 Study of Graphics Design 3 credits

Computer graphic design is a subject expressed through the design of the basic theoretical knowledge, or by using computer imaging, shape, space plans.

It is defined by expressing the general advertising, posters, illustrations, motion graphics, photo collages, the game screen, character design and other uses 2D graphics.

Computer graphics are used in the design field, games and mobile forms of content are combined in the variety.

As a major training course, Illustrated, Photoshop, MM Director, Flash, etc. using other authoring tools to express 2D graphics.

MM619 User Interface Design 3 credits

Interoperability between products that enhance the human content, structure, and use the process, layout, GUI and usability improvements, and the user experience by learning the purpose of innovation is the subject.

In particular, Students will experience user testing, evaluation and design feedback by highlighting the possible design and implementation of an objective evaluation process.

MM620 Expression of 3D Computer Animation 3 credits

A review of academic theory in 3D computer animation and creative expression for the modeling, mapping, motion analysis, fabrication techniques, such as rendering and animation produced using modeling technology research needed to produce the domain-specific representation.

MM621 Workshop of Digital Video Editing 3 credits

Made to existing authoring tools for video post-production stage. Digital editing, compositing, color correction and professional skills and creativity of visual images using digital technology to maximize.

MM622 Digital Animation Seminar 3 credits

2D and 3D digital animation through seminars in the field of technology, academic research and industrial aspects of the field analyzed. Highlights of the seminar and the digital animation industry analysis, technology research, character study, work, study, etc.

MM623 Study of Scenario 3 credits

Synopsis for video production, visualization, narrative structure, character development, the final script and analyze the basic elements of storytelling and research.

MM627 Seminar of Object Oriented Language 3 credits

Most of today's multimedia content is developed based on object-oriented language, so understanding the characteristics of object-oriented language to develop multimedia content efficiently are the basic elements. Understanding the

characteristics of the object, and use them effectively with the multimedia content development, learning how to manage.

MM629 Seminar of Software Development 3 credits

Multimedia content to seek help from a variety of software designed to be a normal service, so the technique of developing software for multimedia services research on the actual impact is immediate. When developing software with respect to future multimedia services reflect the requirements for the scheme will be studied.

MM631 Internet Communication 3 credits

Most of the world of multimedia services to multiple locations in real-time connections going through the internet, so, the utilization of high-content development and internet communications for seamless multimedia services is to study the characteristics.

MM632 Topics of Multimedia Communication 3 credits

Unlike the typical large multimedia data in real-time data transfer is a lot of the continuity and quality assured communications skills are required. Seamless multimedia services is to study the characteristics of a multimedia communications.

MM635 Ubiquitous Sensor Network 3 credits

Implementation of ubiquitous technology is impossible without the application of multimedia content, the quality of the content directly contributes to our success is a ubiquitous technology. Ubiquitous sensor networks are implemented through the use of multimedia in an environment that will examine ways.

MM636 Authoring of Education Title 3 credits

Through multimedia in education has already been proven effective, educational titles can take advantage of the multimedia content efficiently and that other areas can be represented. Wish to proceed at the same time he indicates clearly the intention of training weeks provided with sufficient information to target the educational titles are learning about copyright.

MM637 Korean Language I 3 credits

Korean foreign students speaking, listening, writing to learn as subjects for the smooth life for South Korea to study in college is to learn some basic Korean.

MM638 Korean Language II 3 credits

In Korean data review, analysis, and it can be a presentation in Korean Korean

intermediate level of speaking, listening, to learning to write.

MM639 Multimedia APP Service Design Lecture 3 credits

In the course Multimedia App Service Design Lecture, the students will learn how to write structured application programming for classes that define object properties and events. In addition, iOS and Android development technologies as well as Java, C ++, MFC, and the like are studied concurrently in order to learn more advanced program development techniques.

MM640 Multimedia TCP/IP 3 credits

The IP technology related to internetwork interconnection is the fastest developing technology in nowadays. The multimedia TCP/IP course aims to develop the knowledge of network related internet. It specifically focuses on the industrial application technology and convergence network technology trends which are needed to independently support TCP/IP protocol. The contents and application technology applicable to the real environment based on network convergence technology through project seminar will be studied.

MM641 Internet of Things Technology Seminar 3 credits

The Internet of Things is predicted to bring many changes to the society in the future since it enables the connection of one device to another to which is connected into another system anywhere in the world. In the Internet Technology Seminar course, the operating principles of Internet (IoT) are studied which is considered to be an intelligent technology that communicates information between objects. In addition, through seminars, the impact of the Internet technology development on society and the economy as a whole will be analyzed as well as the Industrial Internet of Things (IIoT) products that are specialized for each industry.

MM642 Multimedia Wire/Wireless Networks 3 credits

In multimedia wired and wireless networks, a wide range of information and communication of wired and wireless network are studied which is the basis of information society. This course covers information protection technology, information protection, Internet, protocols, and wired, wireless, satellite and broadcasting communications. In addition, it also focuses on ADSL and VDSL, which provides high-speed communication for subscribers and be able to learn the wireless network structure.

MM643 Multimedia Wireless Communication Special Lecture 3 credits

In the course multimedia wireless communication special lecture, it is easier to understand the big flow of wireless communication systems through the learning of

the concepts of mobile communications. In addition, the various application systems that include channel models, performance of wireless digital communications, multi-antenna techniques, and multi-user access methods are studied in order to understand the basic concepts of cellular systems. The latest standard trends and the next generation mobile communication technology prospects based on the experience and knowledge of the active players in the domestic mobile communications field will be studied.

MM644 Multimedia Augmented Reality Application 3 credits

AR (Augmented Reality Technology) is a technology that makes it possible to add a special meaning or information to a real object or place. The AR technology can be used for applications such as information service, gaming, sightseeing, entertainment, and medical and disaster countermeasures which are expected to be available in a very wide range. Therefore, the multimedia service requirements are analyzed in the fields where augmented reality can be used in the multimedia augmented reality applications and learn how to implement it.

MM645 Multimedia Social Service Special Lecture 3 credits

In the course multimedia social service special lecture, the students will learn the theory and practice of social network analysis. To do this, the concepts such as density, segmentation, and centering will be examined on how to be applied into actual analysis, as well as the basic concepts such as points, lines, and paths. The multidimensional methodology necessary for the in-depth investigation of social networks will also be studied as well as computer programs used for doing this.

MM646 Multimedia Context-Awareness Technology Seminar 3 credits

The multimedia context awareness seminar course provides an overview of U-computing context awareness technology and related research trends as well as an objective analysis of the state of the art R&D status and test results in the life care environment. In addition, the seminars will improve the understanding of situational awareness techniques and learn about the computing technologies associated with ICT Big Data Technology.

MM701 Multimedia Database 3 credits

Basic concepts of multimedia databases, database design techniques and normalization process, SQL will be introduced. Understanding the basic principles of multimedia database and multimedia database concepts, understanding of the principles of multimedia database modeling and programming through the database, SQL will gain real-world applications using.

MM702 Multimedia Contents Seminar 3 credits

What is multimedia content, Multimedia refers to all services that are available in, Cartoons, games, voice, sound, images, video, etc have made digital Processing and distribution of various information or its contents to allow you to take advantage of produced or how to configure it through a seminar to discuss and study.

MM703 Game Theory Seminar 3 credits

Component of the game, genre, requirements for successful game development, theory and major development practices at development of an analysis of the results through Is a game content for understanding of development as well as we've learned a variety of multimedia media for production and integration of theory and experience as an opportunity to total clean up.

MM704 Multimedia System Seminar 3 credits

Multimedia can enforce courses to enhance understanding of the system, characteristics of an existing commercial operating systems how Characteristics, and multimedia support for effective utilization of the system to build the best system, find out about the scheduling of multimedia and information. Especially the commercial Windows, Linux, Unix multimedia support, about the characteristics of the use is understood.

MM705 Design of Web System 3 credits

Web system is use the Internet to the environment and a system for providing internet services, in order to design these systems to network for them to build systems overall understanding of the for based on system design is learning.

MM707 Ubiquitous System Seminar 3 credits

Ubiquitous Computing in accordance with Environment ubiquitous content and can perform to enhance the understanding of the system as subjects, Characteristics of an existing commercial operating systems and to support ubiquitous computing environment, effective utilization of the system to build an optimal system, for information on scheduling are discussed.

MM708 Human Computer Interaction 3 credits

Through the interaction of users and computers cognitive theory and the elements necessary for building an intuitive interface learning and research on how to build. HCI during the study the basic theory(Psychology, human engineering, cognitive engineering, chromatics) for building GUI configuring the program to build the most necessary interfaces and will learn about the study.

MM709 Web Programming Project 3 credits

Multimedia representation for Internet programming language for will be studied. Languages include HTML, XML and markup languages, PHP, ASP, Perl and server-side scripting language that is represented by CGI (Common Gateway Interface) language the overall configuration and operation principles, Using this expression (programming) can do the project through the web programming language to learn.

MM711 High Level Web Master 3 credits

To build and run web site and the information technology section should not be part of good management. In particular, the website because it is connected with the external user or external inquiries from customers, if any, should be treated quickly. These days the man responsible for the webmaster to scan atmospheres. Webmasters three minutes a bit more conceptual, the web server to build and operate the technical responsibility for the new Web technology being applied primarily responsible wepenjinieo, site selection and design, content management and overall responsibility for the weppeurodyuseoro be divided can. Overall understanding of the web master will acquire and process.

MM712 Media Research Methodology II 3 credits

According to various research topics and the actual process of design and analysis of the media in conjunction with the theory and practice, the various media used in the analysis of cases to review and discuss.

MM713 Media Effect 3 credits

A variety of media to consumers on the social, cultural, and psychological analysis of the effects and how to measure the effect is also studied.

MM714 Study of Advertising 3 credits

In the modern digital environment, the role of advertising and to recognize the importance and understanding of the overall advertising process. General concept of advertising, advertising process, advertising, media, advertising, and advertising appeal types of components, such as advertising on the process for conducting research.

MM715 Understanding of Digital Design Culture 3 credits

Major cultural environment, an understanding of the design of multimedia as a discipline and to serve as subjects of digital media design and technical properties of the basic elements of text, images, sound, video, animation, and a variety of topics will be studied through the lab exercises.

MM716 Workshop of Interactive Media Design 3 credits

he planning of the interactive media is aimed at achieving the overall design ability while carrying out its own whole process. Project types include website, CD-ROM, kiosk, installation, media art, interactive advertising, and more.

MM717 Study of Interactive Media 3 credits

For the detailed design of interactive media ranging from planning the entire process as you proceed to carry the overall design capacity is for the subject. The type of project website, CD-ROM, kiosks, installations, media art, interactive ads can appear in various forms, such as.

MM718 Workshop of Commercial Film 3 credits

Advanced communication techniques required for commercial production of theoretical and practical courses, the comprehensive and systematic analysis of advertising and cultivate the ability to evaluate. Commercial video focuses on the theory that learning and best practices through the analysis of commercial video message to learn to configure the creation of storyboards to the actual production of the basic process is ongoing.

MM719 Production of 3D Computer Animation 3 credits

3D computer animation is a step further training. By default, the built environment, storytelling, 3D project proceeded to create animations.

MM720 Production of Digital Special Effect 3 credits

Movies, games, and broadcast visual effects and a variety of needs such as using particles of natural phenomena (water, fire, wind, explosions, etc.) in the representation of 3D computer animation is produced.

MM721 Production of Digital Cinematography 3 credits

Video scenarios and using digital technology is a step in film making. Academic research and production of digital film technology through systematic analysis of the digital environment to meet the film production.

MM722 Study of Virtual Reality 3 credits

The new use for a variety of industries to build virtual environments and new technologies for theoretical research. Especially interactive 3D gaming, Web 3D virtual environments in the field of utilization and in-depth study on the application content.

MM723 Production of Virtual Studio 3 credits

Recording studio utilizing real images and virtual space, research on how to build and will produce a variety of multimedia video content.

MM725 Multimedia Network Security 3 credits

Treats a theory and a technique intensively about network security concept and structure, network protocol, safety routing for transmitted security of multimedia data through the computer and the various information network. With researches and educates a security technique about accomplishes important network server to multimedia service.

MM726 Seminar of Multimedia New Technology 3 credits

The multimedia is necessary territory that predicts trend of market and developmental of technique direction for the hereafter research, day by day new research area being created with according to demand of market the new technique advances. Studies a takes out method of hereafter research project through seminar about the marketability prediction and new technology developmental direction.

MM728 Software Project 3 credits

Easily develop multimedia, editing, or be processed by the software to actually see production, it is to understand the characteristics of the multimedia.

MM729 Seminar of Ubiquitous New Technology 3 credits

Multimedia and Ubiquitous Computing is an important factor in enabling the ubiquitous trend of technology development has a tremendous impact on the development of multimedia content. Ubiquitous technology to identify the future direction of development of multimedia is used to predict the direction of research.

MM730 Topics of Multimedia System 3 credits

Multimedia system storage, processing, transmission, contents and other safety requirements availability is needed, so it is studied.

MM731 Topics of Communication Security 3 credits

It studies the way multimedia contents are damaged during storages and processing and the economic value of a way to avoid the loss is investigated.

MM732 Multimedia Programming 3 credits

As it is possible to develop multimedia contents by application of various tools and programming language, it should be carefully determined according to characteristics of the content of any tools and programming languages . Also

to study about the latest tools and language is to develop higher than the value of multimedia content available

MM733 Design of Mobile System 3 credits

Used in mobile devices and multimedia content over a network using a common system that have different characteristics from the content, so seamless mobile services, mobile system architecture to be investigated.

MM735 Seminar of Multimedia Operating System 3 credits

As qualified operating system have different characteristics for multimedia services on a common system used operating systems , so this is studied.

MM736 Design of Multimedia Database 3 credits

Multimedia contents are generally high capacity, so database services storing and processing these contents have completely

different characteristics with a general text-based database. Also multimedia contents study about research directions for multimedia database to seek such as content-based search techniques.

MM737 Authoring of Game Title 3 credits

The game can take advantage of the multimedia content efficiently is a typical field, clearly expressed intent of the game, while providing enough information to share with the destination titles are learning about copyright.

MM738 Project of Web Design 3 credits

To ensure multimedia services performed, the type of operating system, network status, communication, and considering the content of the web system and how to design research.

MM739 Korean LanguageIII 3 credits

It is studied about majors freely to communicate and understand that a mutual opinion is changeable, while speaking, listening, writing the high level of korean language .

MM740 Multimedia Augmented Reality Special Lecture 3 credits

Augmented Reality (AR) is a user interface technology that supports the user's activities by overlaying digital information in the real world. In this course, the students will learn about augmented reality (AR) that can apply various digital data into real space through the fusion of high performance intelligent mobile device and high speed wireless data communication technology.

MM741 Multimedia Digital Signal Processing 3 credits

The contents of digital signal processing is handled extensively in a wide range of multimedia digital contents. The basic concepts of discrete signals and systems will be studied, the time domain analysis and the frequency domain analysis will be examined, and then learn the design of digital filters, and eventually, the MATLAB project in order to improve the practical skills.

MM742 Multimedia Interaction Technology Seminar 3 credits

The Multimedia Interaction Technology Seminar provides a wide range of insights into design by creating a theoretical inquiry that explores the design as a whole, and a creative and artistic conceptual design and basic modeling design required for the real digital content creation. In addition, it develops the ability to express the interaction modeling design which is applicable to various multimedia contents such as computer graphics, game, IPTV, and mobile.

MM743 Multimedia E-Learning Project 3 credits

The multimedia e-learning project provides a general knowledge of E-Learning, knowledge and management methods that E-LEARNING project manager should have, and the sequence and necessary resources for actual projects. Also, marketing related to e-learning will be studied.

MM744 Multimedia Service Convergence Technology 3 credits

In recent years, multimedia broadcasting and communication have provided new types of different contents from existing broadcasting through DMB and IPTV services, and various multimedia type of additional services are provided that creates a higher demand for new broadcasting services. Therefore, the multimedia service convergence technology focuses on the digital contents area which is the most used among digital contents and has the most added value. It also provides an understanding on how to provide digital contents in convergence environment due to the changes in media contents.

석사논문연구 I (Research for the Master's Degree I) 0 credits

석사논문연구 II (Research for the Master's Degree II) 0 credits

박사논문연구 I (Research for the Doctoral Degree I) 0 credits

박사논문연구 II (Research for the Doctoral Degree II) 0 credits

박사논문연구 III (Research for the Doctoral Degree III) 0 credits